



Technical Data Sheet

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Revised: NA

ESD ABS Filament

SECTION 1, IDENTIFICATION

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| Product Part Number: | F24801 |
| Recommended Use: | 3D printing filament |
| Restrictions on Use: | For use with 3D printers |

SECTION 2, DESCRIPTION

Description: ESD-Safe ABS is a high-performance 3D printing filament formulated utilizing state-of-the-art conductive additives and premium ABS. This filament is ideal for applications that require consistent and reliable electrostatic dissipation (ESD) protection. An amorphous polymer that offers excellent dimensional stability and high thermal resistance.

Acrylonitrile butadiene styrene

Applications: End-use components, electronic products
Industrial equipment and jigs and fixtures for assembly of electronic components
Semi-con: HDD components, wafer handling, jigs, casings, & connectors
Industrial: conveying, metering, and sensing applications

Key Features: Offers electrostatic dissipation (ESD) protection and prevents a buildup of static electricity.

SECTION 3, SPECIFICATIONS

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| EXTRUDER TEMPERATURE | 235C - 260C |
| BED TEMPERATURE | 110C – 130C |
| HEATED BED | Required |
| RECOMMENDED BUILD SURFACE | Wolfbite for ABS, PETG, TPU, and TPE |
| DIAMETER | 2.88mm |

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| COLOR | Black |
| COMPATIBLE MACHINE | AXIOM , AXIOM 20 , AXIOM Dual Extruder, EVO |
| COMPATIBLE SUPPORT MATERIAL | HydroFill Water-Soluble Support |

GENERAL

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| Density ISO 1183 | 1.09 g/cc |
| Print Speed | 50 - 70 mm/sec |

THERMAL

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| Glass Transition Temperature (Tg) DSC 110C – 130C | 105 °C |
| Heat Distortion Temperature (HDT) @ 0.45MPa ISO 75 | 102 °C |

MECHANICAL

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| Tensile Elongation, Break ISO 527 | 3.8 % |
| Tensile Modulus ISO 527 | 2131 MPa |
| Tensile Strength ISO 527 | 42 MPa |
| Flexural Modulus ISO 178 | 2274 MPa |
| Flexural Strength ISO 178 | 80 MPa |

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| Electrical Property -Surface Resistivity IEC 60093 | >10 ⁶ - 10 ⁹ < Ohm/sq |
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SECTION 4, ADDITIONAL INFORMATION

For challenging prints with complex internal geometry, ESD ABS is compatible with [HydroFill Water-Soluble Support](#).

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